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(54) Title: AGRICULTURAL BALE ACCUMULATOR AND METHOD THEREFOR

(57) Abstract

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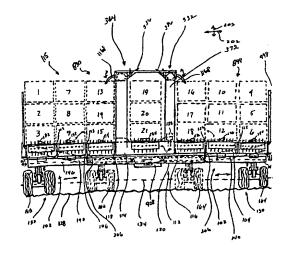
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A load bed extension module (102) expends and supports a bale accumulating capacity of the accumulator (100) along a horizontal axis (202). A bale stacking module (332) expands a bale accumulating capacity of the accumulator (100) along a vertical axis (203). A bale advancement module (798) advances a fully formed bale onto a load bed (113) ahead of a successive bale to create a predetermined space (808) between the bales to permit the fully formed bale to be handled by the accumulator (100) in an amount of time before the successive bale travels through the predetermined space (808). A bale arrangement control module (830) permits a dynamic arrangement of bales to be accumulated on the accumulator (100) within a bale accumulating capacity of the accumulator (100). A bale stabilization module (899), provided by a load bed leveling module (900) and/or a lateral bale stabilization module (996), encourages the bales to remain at their accumulated positions on the accumulator (100) prior to their discharge from the accumulator (100). A permissive bale discharge module (1052), provided by a sliding (1066), a hinged (1056) or a rotating (1068) bale support member, or a pivoting (146) or a sloped (1074) load bed (113), or a bale advancement module (798), permits the accumulator (100) to discharge a bale accumulated on a center portion (114) of a load bed



(113) along a bale receiving axis (201) without the load bed (113) interfering with a successively received bale. A selective bale discharge control module (1093) permits the accumulator (100) to selectively control a discharge of bales received on a bale receiving portion (114) of a load bed (113), located along a bale receiving axis (201), and/or a bale accumulating portion (116, 118) of the load bed (113) located adjacent to the bale receiving portion (114). A bale speed discharge control module (1106) controls a discharge speed of bales accumulated on a load bed (113) to a ground surface (128) responsive to a traveling speed of the accumulator (100). A field location control module (1115) controls a bale accumulation operation and/or a bale discharge operation of the accumulator (100) responsive to a location of the accumulator in a field (1135). One or more of these modules advantageously provides the accumulator (100) with a large bale accumulating capacity and intelligent bale accumulation and bale discharge operations to permit efficient, flexible and desirable harvesting of hay and forage.

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